REMARKS

The February 26, 2004 Office Action has been carefully considered. The claim amendments above and the following comments are presented in a bona fide effort to address all issues raised in that Action and thereby place this case in condition for allowance. Specifically, claims 13, 16-19, 25 and 26 have been amended, to more clearly distinguish those claims over applied art. Other claims, however, remain unchanged. Care has been taken in revising the claims to avoid entry of new subject matter. Claims 1-28 are pending and should be in condition for allowance, for reasons discussed below. Prompt favorable reconsideration of the amended application is solicited.

The summary form in the Action indicated that the formal drawings submitted on December 6, 2000 (the application filing date) were acceptable. However, in response to a January 26 2001 Notice to file Corrected Application Papers, Applicants submitted a new set of formal drawings on March 26, 2001, specifically, with a corrected set of margins. The Office Action did not indicate the status of the formal drawings filed on March 26, 2001. It is requested that the Examiner review the file and confirm both receipt of the March 26, 2001 drawings and that those drawings satisfy all currently applicable formal drawing requirements.

It is noted with appreciation that the Examiner allowed original claim 27. The Action, however, included an Examiner's Statement of Reasons for Allowance. It should be noted that claim 27 has been allowed in this case, without any rejection thereof. The allowed claim therefore should be entitled to the broadest scope and the broadest range of equivalents appropriate in light of the language thereof and the supporting description in Applicants' specification. Entry of the Statement of Reasons for Allowance into the record should not be construed as any agreement with or acquiescence by Applicants in the reasoning stated by the

Examiner, particularly to the extent if any that the Statement differs from the broad scope that claim 27 might have in light of the supporting description in Applicants' specification.

Claims 1-3, 5, 6, 11-15 and 25 stand rejected as anticipated by U.S. Patent No. 5, 095,535 to Freeburg. This rejection is traversed.

The Freeburg patent discloses an antenna selection technique for a cellular telephone. The Freeburg technique employs multiple sectors provided by multiple directional antennas at the receiving terminal. The terminal receiving the multipath signal evaluates the signal at each of the multiple sectors, and the terminal selects to use the data that is received via the path which has the least amount of signal degradation caused by the multipath interference. This selected path also is used for subsequent transmission of the data between both terminals in a duplex operation (column 3, lines 36-48). The background acknowledges that spread-spectrum systems are known, but Freeburg states that such systems are disadvantageous due to the circuit complexity (column 1, line 67, to column 2, line 5) and thus the selective antenna approach is desired (column 2, lines 11-28) instead of spread-spectrum. As such, the actual disclosed smart antenna system does not include spread-spectrum type transmitter and receiver equipment, as specified for example in claim 1. There is a mention of spread-spectrum in the background, but it is a description of a prior art technique that Freeburg's antenna selection is intended to distinguish.

It is respectfully submitted that no system disclosed in the Freeburg patent actually meets all of the limitations of independent claim 1. For example, Freeburg does not disclose a system with a spread-spectrum transmitter and a spread-spectrum receiver **and** the smart selection of an antenna from among a plurality of sector antennas. The system that Freeburg describes in the background has spread-spectrum communications, but that system does not have smart selection

among sector antennas. By contrast, the system Freeburg discloses in the detailed description has antenna selection, but that system does not use spread-spectrum communications. Hence no one system actual disclosed by Freeburg meets all of the limitations of independent claim 1. Further, it would not be appropriate or obvious to combine the two systems in view of Freeburg's own teachings. The background acknowledges that spread-spectrum systems are known, but Freeburg states that such systems are disadvantageous due to the circuit complexity (column 1, line 67, to column 2, line 5) and thus the selective antenna approach is desired (column 2, lines 11-28) instead of spread-spectrum. Such an express teaching away clearly shows that Applicants' invention of claim 1, combining a spread-spectrum transmitter and a spread-spectrum receiver **and** the smart selection of an antenna from among a plurality of sector antennas, should be patentable over Freeburg. The anticipation rejection of independent claim 1 and of claims 2, 3, 5, 6, 11 and 12 therefore is improper and should be withdrawn.

Claim 13 specifies coupling each sector antenna to spread-spectrum receiving circuits, selectively transmitting a spread-spectrum signal via a selected one of the antennas and during that transmission configuring other antennas to receive spread-spectrum signals. Freeburg does not actually disclose a methodology that satisfies all of these aspects of independent claim 13. The method disclosed in the background uses spread-spectrum communications (column 1, line 67, to column 2, line 28), but that method does not involve the claimed antenna selection, selective transmission and other antenna configuration steps. Conversely, Freeburg discloses an antenna selection technique, but the disclosure is quite clear that the allegedly inventive technique does not entail spread-spectrum communications. Hence, neither method described in Freeburg satisfies claim 13. It is improper and unobvious to consider a combination of the two methods discussed in the Freeburg patent because of an express teaching away from such a

combination. The background alleges that spread-spectrum system communications are disadvantageous due to the circuit complexity (column 1, line 67, to column 2, line 5) and thus the selective antenna approach is desired (column 2, lines 11-28) **instead** of spread-spectrum. The anticipation rejection of claim 13 and of claims 14 and 15 therefore is improper and should be withdrawn.

Claim 25 relates to a program product, to cause at least one processor to perform steps, which are substantially similar to the steps of the method of claim 13. Claim 25 therefore should be allowable over Freeburg for the same reasons as claim 13.

Claims 16-19 and 26 stand rejected as anticipated by U.S. Patent No. 4,485,486 to Webb et al. (hereinafter Webb). This rejection also is traversed.

Webb discloses a technique for assigning channels through a smart antenna system and controlling handoff operations. A microprocessor controlled base site controller periodically monitors the mobile station signal strength, and when signal strength degradations are detected, the controller either changes the base station sector antennas coupled to voice transceivers, increases or decreases radiotelephone power output, or hands the radiotelephone off to another cell. The Examiner asserts that this technique involves determining rate of change.

Claims 16 and 26 have been amended to indicate that at least one aspect of the handoff decision is controlled in response to the assessed movement of the mobile station. For example, the decision to handoff to a different antenna, to a different serving sector or to a different cell may be based on the detected movement of the mobile station. Even if the Webb patent suggests determining rate of change, it does not teach basing an aspect of handoff control on detected movement. The text cited for rate of change in the Webb patent actually suggests only making the system changes based on actual level rather than the rate of change (see e.g. column 5, lines

9-40) alleged in the rejection. It is respectfully submitted that Webb does not teach assessing mobile station movement and controlling an aspect of hand-off in response to the assessed movement, as now specified in each of claims 16 and 26. The anticipation rejection of claims 16 and 26 and of claims 17-19 that depend from 16 should be withdrawn.

New claim 29 depends from claim 16 and should also be allowable. Claim 29, however, specifies a further distinction over Webb. Claim 29 indicates that the signal strengths are those of spread-spectrum signals received via the one or more sector antennas. The Webb patent does not mention spread-spectrum.

The Examiner rejected claims 20-24 and 28 as anticipated by U.S. Patent No. 5,794,153 to Ariyavisitakul et al. (hereinafter Ariyavisitakul). This rejection also is traversed.

Claim 20 relates to a technique for arranging sector antennas into plural serving sectors of a cell base station. By definition, a "sector" is a planar figure bounded by two radii, and the "serving sectors" in the claim are different regions extending radially out from the same base station of one geographic cell site (see e.g. application Fig. 2). Ariyavisitakul discloses a PCS system with simulcasting microcells. This patent focuses on dynamic resource allocation based on estimates of local traffic load. The rejection apparently is predicated on an interpretation of the microcellular transceivers distributed throughout the cell as the claimed serving sectors and antennas. It is respectfully submitted that this interpretation is inappropriate. The separately distributed microcells of Ariyavisitakul are not different regions extending radially out from the same geographic cell site. Since the microcells are not "serving sectors," the processing of Ariyavisitakul does not perform any of the claimed method steps as those steps relate to serving sectors or sector antennas. Since it does not perform the method steps, the Ariyavisitakul patent

does not anticipate independent claim 20, and the rejection of claim 20 and dependent claims 21-24 should be withdrawn.

Claim 28 relates to a program product, to cause at least one processor to perform steps, which are substantially similar to the steps of the method of claim 20. Claim 28 therefore should be allowable over Freeburg for the same reasons as claim 20.

Claim 4 is rejected as allegedly obvious over Freeburg in combination with U.S. Patent No. 4,317,229 to Craig et al. (hereinafter Craig). Craig is applied as a secondary teaching, for its disclosure of a sector antenna switch. The Examiner rejected claims 7-10 for alleged obviousness over Freeburg in combination with the Webb patent. Here, the Examiner alleges that it would have been obvious to use multiple transmitters and receivers in the Freeburg system. Both of the obviousness rejections relate to claims that depend from claim 1. It is respectfully submitted that the secondary teachings of Craig and Webb do not make up for the deficiency in the teachings of Freeburg discussed above relative to parent claim 1. Claims 4 and 7-10 should be patentable over Freeburg in combination with either Craig of Webb.

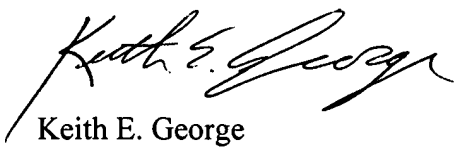
For reasons discussed above, all of the pending claims (1-29) should be allowable over the art. It is respectfully submitted that this case should be in condition for allowance. Prompt favorable reconsideration and issuance of a notice of allowability of all of the pending claims are earnestly solicited.

It is believed that this response addresses all issues raised in the February 26, 2004 Office Action. However, if any further issue should arise that may be addressed in an interview or obviated by an Examiner s amendment, it is requested that the Examiner telephone Applicants' representative at the number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY



Keith E. George
Registration No. 34,111

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 KEG:apr
Facsimile: (202) 756-8087
Date: May 26, 2004